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RESEARCH ARTICLE

Project governance practices in urban public housing projects: a case study of public housing in Malaysia

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Abstract

The urban public housing project, especially for low-income people, is essential to cater to the increasing urbanisation rate in Malaysia. This study aimed to gain an understanding of the project governance practices in urban public housing projects in Malaysia, which will lead to better project delivery and the successful outcome of the projects. A single case study was conducted on a public housing project or known as *Projek Perumahan Rakyat* (PPR) in Kuala Lumpur, and data for this study was gathered using semi-structured interviews with six (6) public officials, document analysis, and observation. The findings of this study indicate the positive interplay between project actors guided by the elements of trust, stakeholder management, empowerment, and collective decision making, which create value for the project. Hence, this article contributes to the dynamic understanding of how public officials practice project governance in conducting their works related to urban public housing projects. The findings of the study will enable related public organisations to reinforce the underlying project governance elements towards the strengthening of urban public housing delivery

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system. Case study research in different models of urban public housing could extend the discovery of other project governance elements while validating the findings of this study from different perspectives. The findings of the study are limited due to the use of a single case study related to the urban public housing project and its contexts.

Keywords:

Public housing, project governance, urban poor, stakeholder management, Malaysia.

Introduction

The success of a housing system is determined by the governing parties (Kamal, Lai and Yusof, 2020). The governance structure of urban public housing in Malaysia starts from the federal government who formulate policies, laws and regulation. The federal government will fund the development of urban public housing while the state government is responsible for providing suitable land and the selection of the participants (Shuid, 2016). Besides, the local authority in major cities such as Kuala Lumpur is also involved in the administration and maintenance of urban public housing apart from approving development order and construction activities. Basically, PPR is an urban public housing project to provide affordable houses to low-income people, including the urban poor as well as the squatters and it is under the purview of the Ministry of Housing and Local Government (KPKT), specifically through the National Housing Department (JPN), Malaysia.

The constant grow of urbanisation rate in Malaysia, which stands at 76.2% in 2019 compared to 61.7% in 2000 (Department of Statistics Malaysia (DOSM), 2020) create a higher demand for low-cost housing in the urban area. The current method adopted for urban public housing in Malaysia is based on the supply derived from both the public and private sectors where the former plays major roles through several agencies particularly in building and managing affordable housing for the urban bottom 40 (B40) group. However, the affordability issues and the tendency of the private sector towards building medium and high-cost housing cause a considerable gap between the needs and the availability of low-cost housing. These have imposed various challenges and exerting pressure for the government to build more public housing to accommodate the B40 group (Bakhtyar et al., 2013; Khazanah Research Institute (KRI), 2015). For the record, the government has spent almost RM3.8 billion on PPR projects construction for the past ten years, which have benefited more than 46,000 participants and their family (KPKT, 2020). Nevertheless, the stakeholders involved in each level of public housing development are segregated through different rules and measures (Teoh, Olanrewaju and Tan, 2018) and the rising issues of unaffordability, poor maintenance and mismanagement which affected the public housing schemes (Bilal, Meera and Razak, 2019) signal the challenges and needs for governance in public housing to be explored. Previous research highlights the critical success factors of housing governance to deliver successful affordable housing (Olanrewaju, Tan and Lee, 2017). Recent evidence suggests that a public-private partnership in the housing sector to address the affordability issues among the B40 group is essential (Masram and Misnan, 2019) while the lack of knowledge and understanding on project governance among the public officials involved in project planning and implementation need to be addressed (Abu Hassim, Kajewski and Trigunarsyah, 2017). The successful delivery of PPR projects is crucial to mitigate the widening household income gap of the B40 group (KRI, 2018)

and to control the financial burden of government in constructing and maintaining the projects (Shuid, 2016). Hence, any failure of projects dedicated to the urban poor is not an option for the government. Project failure could be the result of a lack of project governance practices (Hjelmbrekke, Klakegg and Lohne, 2017), while research has shown that effective practices of project governance could contribute positively to the project outcomes (Yin et al., 2008).

Therefore, it is essential to understand the practices and its underlying project governance elements from the perspective of public officials since the increasing demand for development and redevelopment of urban public housing projects makes the importance of the application of project governance as a means to steer the projects as well as providing a framework for decision-making and stakeholder management. Project governance is a management tool to align project objectives with its organisational strategy, provide means for performance monitoring and framework for organisational processes and facilitate decision making as well as support successful project delivery (Macheridis, 2017).

Considering the problem statement, this paper seeks to address the question of how project governance elements are practised in real project settings. The following sections present the literature review and theoretical lens, the methodological approach, the findings, and discussion, as well as conclusions, recommendations, and limitations.

Literature review

Project governance is about aligning and delivering the project objectives with an all-embracing organisational strategy to create benefits to the stakeholders at every level of organisation (Biesenthal and Wilden, 2014; Levie, Burke and Lannon, 2017). In recent years, there has been an increasing amount of literature focusing on the practices of project governance in various industries (Volden and Samset, 2017; Brunet, 2018) as well as the derivation of governance interplay between project actors (Riis, Hellström and Wikström, 2019) while project governance is variously defined according to the perspective of the researchers and its contexts. Abednego and Ogunlana (2006) defined project governance as the process of decision making and the process in which that particular decision is executed, while Bredillet (2008) viewed governance from the perspective of the project as performance and accountability in decision making and management. The literature review outlines the project governance practices and its related issues to urban public housing.

PROJECT GOVERNANCE

Project governance covered the organisational issues arising at the edge of the project and its parent organisation as well as the parent organisation of the project sponsors (Winch, 2014; Chang, 2015). Volden and Samset (2017) highlighted the project governance practices through the application of stage-gate model at the project level with clearly defined roles and responsibilities, including independent quality assurance reviews of project documentation at specified decision points. Besides, governance practices at the project level involved the planning and coordination activities with various stakeholders participation, and the process is multi-level since it is also practised at the organisational and institutional level (Brunet, 2018).

However, according to Khan et al. (2019), deficiency in project governance practices could have originated from decision making, stakeholder management and role ambiguity while Lizarralde et al. (2013) suggested that project governance is practised through formal

project structuring, informal communication and structuring as well as clear definition of project stakeholder. Hence, clear roles and definition of each stakeholder will enhance the transparency of the project and make them accountable in every decision made throughout the project and subsequently contribute to the good project governance practices.

Lappi and Aaltonen (2017) discovered six project governance practices in public sector agile software projects, namely business case, contracting, controlling, steering, decision making and capability and competence building. While these practices are standard in normal project circumstances, the interface elements that imply the practices are related to the decision-making authority and empowerment practices which are significant in every practice of project governance. The organisation conducts a project through the establishment of a temporary organisation which involved several project actors, and this temporary organisation is empowered to make decision and execute it. The interplay between the organisation at various levels throughout project planning and implementation must consider the stakeholders and target groups of the project. Lack of participation in project design, selection, and decision making, as well as low commitment of stakeholders, contribute to the failure of project governance (Shiferaw, Klakegg and Haavaldsen, 2012). This led to the question of how public officials perceived when facing main stakeholders, such as target groups that are always in need.

URBAN PUBLIC HOUSING PROJECT FOR LOW-INCOME PEOPLE

An effective delivery system put in place by the authorities which involved proper planning and implementation capability, efficient use of resources, consistent monitoring and effective impact assessment of the projects is crucial for the attainment of public projects outcomes especially when it involved the needy (Siwar, 2006). However, the reality of fragmentation in public projects could broaden the accountability, communication and management effectiveness gap.

According to Teoh, Olanrewaju and Tan (2018), lack of coordination, cooperation and collaboration among the housing stakeholders are the main factors that lead to the Malaysian housing crisis. The same authors suggested the practice of housing governance which could bring various housing stakeholders on the same page for collective decision making and action-taking. This is in line with Kamal, Lai and Yusof (2020) who proposed a one-stop centre to act as a catalyst to improve the public housing implementation and manage various stakeholders.

Therefore, a valid link must be established between the organisation's top management and the management of the project. While the valid link between these two actors is essential for the completion of PPR projects, the end-user of the project, which is the low-income people will receive the ultimate benefit of it. A study by Musa et al. (2015) found the end-user involvement together with good project location and appropriate design significantly related to the success of public housing projects. The government, as a primary financier of public projects, must ensure it embraces effective decision making, directing, and represents accountabilities in developing the project. This is consistent with Joslin and Müller (2016), who opined that project actors view stakeholders as the ultimate receivers of the project and their fulfilment of the outcomes as the critical success factor. Lin (2018) discovered a low level of residential empowerment in social housing construction, which contributed to the low level of participation at the decision-making level in project planning and implementation, and this has led to the deficiency of the delivery of the project. Therefore, it is noticed that empowerment should not only be exercised on the public officials in various project actors but also to the primary beneficiary of the projects throughout the project cycle.

In Singapore, the Housing and Development Board (HDB) is the master planner for all public housing projects where the agency develops and manages the entire project from production to consumption process of housing project. Hence, through the centralisation of all public housing projects under a single authority, Singapore government could avoid problems of duplication and fragmentation of works and duties related to public housing as can be seen in other countries. Apart from that, Singapore has embraced best practices of project governance through its pragmatic program implementation whereby planning is quickly translated into housing policies and schemes while priority is matched by resources and stakeholders support in terms of the policy, regulatory, organisational, legal and financial (Phang, 2015).

Overall, these studies highlight the identification of various project governance elements in governing projects and the project stakeholders' interaction towards effective project delivery. However, it is unknown how the governance practices among the project stakeholders will contribute to the effective project delivery in the context of PPR projects.

THEORETICAL LENS

Project governance theories are derived from governance theories that have evolved. Traditionally, governance is described from four several governance-related theories, such as transaction cost economic (TCE) theory, agency theory, stewardship theory and stakeholder theory (Yusoff and Alhaji, 2012) as well as organisational and management-related theories. This study embraced stakeholder theory as a theoretical lens in light of the ethics and values interaction played by the government officials in delivering public projects to the specific target groups. The stakeholder approach to business is about creating values for the stakeholders through business ethics, which focus on principles and rules, good character, and outcomes (Freeman et al., 2010). It is an organisational approach in managing business and organisation itself through managerial and stakeholder management philosophy, which constitutes attitudes, structures, and practices (Donaldson and Preston, 1995).

From a public project perspective, stakeholders are essential groups to be recognised since they are involved in decision making throughout the project cycle and vital in creating strong working collaboration and partnership in delivering successful projects for the benefits of the poor. As the case study involved the governance practices among the public officials of various stakeholders in the urban public housing project, stakeholder theory best fits the study since other theories relied heavily on the relationship and behaviour among the contracting parties without emphasising directly on the stakeholders' participation.

Methodology

This section offers an explanation on how the study was undertaken and the mechanisms of achieving validity and reliability.

RESEARCH APPROACH

A case study research strategy is adopted in this study. As an in-depth description and analysis of a bounded system (Merriam and Tisdell, 2016), the case study is the most suitable method to be used since it enabled the researcher to dig deep and look at the subject matter from the micro perspective regarding the contexts of project governance real-life practices and its elements.

SELECTION OF CASE

A single case study is used for this study as it served as a critical case that could explain the phenomena from the perspective of the theoretical lens. This is consistent with Yin (2018) as the project governance practices in the context of this case offer the unknown territory of knowledge based on the stakeholder theory of governance. Thus, a single case study in this context is significant to explain the phenomenon and to refocus future investigation for other types of projects (Yin, 2018).

PPR A (pseudonym) in the Federal Territory of Kuala Lumpur is selected as a case study because it fulfils two main requirements, which are the project is just completed within two years from this study, and the project is located at the urban area to represent the urban public housing project for the poor. Apart from that, PPR projects are the main public housing projects which are constructed by the government with high allocated costs to provide benefits for the low-income groups. The selection of this project as a case study satisfies the requirements of a critical case, which are strategically crucial about the problem statement of this study and also its ability to achieve information that permits logical conclusions of the themes (Flyvbjerg, 2006).

SELECTION OF INFORMANTS

This study has taken the position to interview public officials involved in the planning and implementation of the project, and it is consistent with the position towards stakeholders as explained by Derakhshan, Turner and Mancini (2019) which focuses on the relationship between internal stakeholders (government machinery system) with an emphasis on the organisation's long term performance, trust-building, and mutual value creation. All the informants selected for the interviews fulfil the requirement of having experienced, involved and managed this project. Table 1 shows the informants' basic information.

Table 1 Basic Information of the Informants

Informant	Designation	Agency	Working Experience
Informant 1	Assistant Secretary	Housing Planning Division, JPN	10 years
Informant 2	Civil Engineer	Housing Planning Division, JPN	11 years
Informant 3	Principal Assistant Secretary	Housing Management Division, JPN	15 years
Informant 4	Facility Manager	JPN Representative	11 years
Informant 5	Architect	Project Management Section, Development Division, KPKT	11 years
Informant 6	Assistant Engineer	Monitoring Unit, Development Division, KPKT	11 years

DATA COLLECTION AND ANALYSIS

The case study protocol was developed as a data collection plan, and thus enhances the reliability of the study (Eisenhardt, 1989; Yin, 2018). Multiple data collection techniques have been utilised, such as semi-structured interviews, document analysis and observation. Three (3) relevant documents which are the procedure for house application, monthly progress reports and project delivery document, as well as researcher's reflection memo, were analysed during document analysis. At the same time, an observation was conducted for three hours which included a field visit to the completed projects and direct observation to the facilities and the way they were utilised by the participants.

All interviews with the informants were conducted in the native language (*Bahasa Melayu*) and were transcribed in the said language, while the findings of document analysis and observation were recorded in English. The data were analysed through NVivo 12 software with findings, supporting evidence, and selected quotes from the interview translated into English as proposed by Merriam and Tisdell (2016). On the other hand, this study emphasises on abductive approach, which enables the researcher to explore the project governance practices based on the emerging themes and patterns inductively, as well as deductively comparing the trends within the constructs found during the literature review in order to answer the research question.

VALIDITY AND RELIABILITY

This study used multiple methods of data collection and multiple data sources to enhance the internal validity of the study (Merriam and Tisdell, 2016). Subsequently, early findings of the case study were sent through email to three (3) key informants, and the feedbacks and critical comments by them functioned as a validation process to increase the credibility of the study (Merriam and Tisdell, 2016). Besides, the application of case study protocol is consistent with Yin (2018) to enhance the reliability of the case study while the researcher keeps all the evidence in accordance to the sequence of the data collected to boost the confidence and reliability of the study (Merriam and Tisdell, 2016; Yin, 2018).

Findings

This section provides a brief explanation about the project selected for the case study followed by the findings, which are project governance practices according to the project cycle.

BRIEF DESCRIPTION OF THE CASE

PPR A was constructed to provide houses to the squatters and urban poor. While the project is managed by KPKT and JPN, Kuala Lumpur City Hall (DBKL) is the responsible agency to select the participants and manage their relocation. The project was awarded to the contractor through direct negotiation arrangements with the design and build implementation method. The total project cost is RM82.1 million (or equivalent to USD26.7 million in 2012). The main project scopes are the construction of multi-storey 500 units of the houses where the size of each house is measuring at 700 square foot, as well as multi-storey car parks, main hall, kindergarten, shop lots, utility substation, playground, and trash house. The project started on 12 October 2012 and was fully completed on 22 December 2017 with two extensions of time (EOT) amounting to two (2) months and ten (10) days given to the contractor. As the project is implemented through design and build, the Project Director or PD came from

KPKT. The defect liability period (DLP) of two years was completed on 21 December 2019. The project is owned by JPN, particularly Planning and Project Development Division, while KPKT, through its Development Division, is the implementing agency. Early works in terms of the project application, budget screening, and project approval are conducted by JPN, while the Development Division of KPKT (DD-KPKT) only takes over the project upon project approval.

PROJECT GOVERNANCE PRACTICES

Figure 1 illustrates the findings of project governance practices in project development for the case. Each phase consists of themes and categories which represent project governance practices of PPR based on the analysis of multiple sources of evidence.

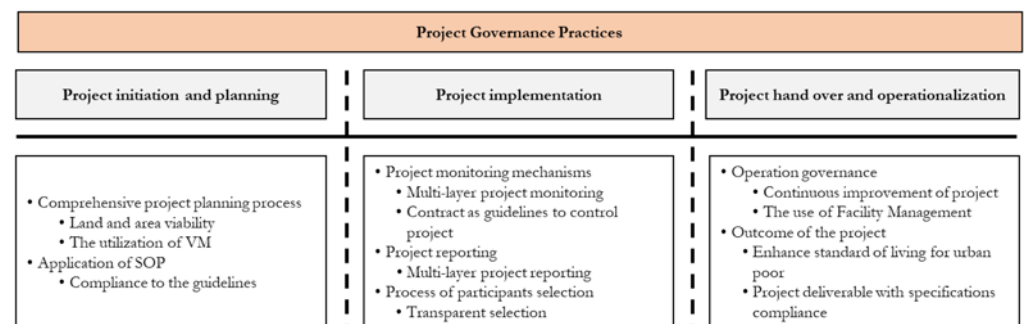


Figure 1 Project Governance Practices

Project initiation and planning

Most of the PPR projects utilise land owned by the state government, where initially, the state government will propose a PPR project to be funded by the federal government while they provide the land. Apart from the budget of the project, JPN, as the department tasked to manage the PPR project, will look into the suitability and viability of proposed land before any decision is made. As JPN does not have the expertise in evaluating land viability, DD-KPKT technical officials are brought along to conduct a site visit at the proposed land. Similar to those arrangements, some PPR projects are proposed by a third party, namely the contractor or developer itself, on the land owned by them. In this case study, the developer and DBKL both owned a part of the land respectively in which it was occupied by squatters for the past 30 years while the federal government owned a vacant land adjacent to the land owned by DBKL. Therefore, it was the developer-cum-contractor themselves who proposed the land to be developed as they planned to develop a private housing project on their land, which was occupied by the squatters. Thus, to accommodate the squatters, a PPR project is approved by the government through JPN in collaboration with DBKL, and the remaining land owned by the developer was developed as a private housing project.

Once the project was approved and the contractor was appointed through direct negotiation under the responsibility of the Ministry of Finance, JPN, KPKT, and the contractor were involved in series of project cost negotiations to get the best price that benefits all parties. However, before the negotiation, a value management lab was conducted where it involved all stakeholders of the project. The VM lab is considered compulsory for this project as required by the government since the value of the project exceeds RM 50 million. According to

Informant 2, VM lab is organised to extract the best values of the project for the benefit of all stakeholders:

“As in the past, it was true that MEA (Ministry of Economic Affairs) always wanted to cut the project budget (during VM lab), but nowadays, it is more about improving project outcomes and the quality of the project. I have seen it for the past two to three years; they never cut the budget. (They) want to enhance project values.”

There are several guidelines involved in this project, according to the project actor. For example, JPN has its guidelines in the selection process of PPR participants and managing PPR after it is completed. Similarly, DD-KPKT has its procedures in ensuring the project is planned and constructed accordingly. The guidelines have an essential checklist for project brief, customer verification, documentation, processes, as well as a site visit and meeting to-do lists. It is a basis for project management practices throughout the project development. The analysis has discovered the understanding of the officials with regards to guidelines relevant to their scope of works. For instance, from the perspective of DD-KPKT, a contract is used as the main guideline during project construction to control and manage the contractor. Informant 5 admits:

“For us, when we receive the project, we just do it. We do not question who gets the job... it is not our jurisdiction. For us, to do that work, we signed the contract, as long as we stick to the contract, we will be safe. We will say no if the contractor proposes something beyond the contract’s provision. (For example) substandard material, outside of contract scopes or things that should not have; definitely, we will not do.”

Project implementation

It is found that project monitoring and reporting are practised through multi-layer mechanisms that involved main project actors, namely the contractor, consultants, KPKT, and JPN. The monthly site meeting provides DD-KPKT with physical works and financial progress percentage, S-Curve, and CPM for every month. The monthly report is tabled at the ministry-level development meeting, together with other on-going projects. DD-KPKT officials refer to vital indicators in the report, and if there is any delay detected, the regional branch of DD-KPKT will take suitable actions such as intervention, warning letter, reminder letter, and regular follow up site visit. At the same time, the client, which is JPN, receives an update report from DD-KPKT, and they are briefed about progress of project every month. It is discovered that officials in DD-KPKT cross-check with the regional office and their appointed consultants to ensure the validity of the progress data, and this is crucial for interim payment confirmation. Informant 6 notes:

“... We will ask them to submit to us officially with regards to whatever happens on-site, we will check first, if it involves a site monitoring, we will counter check it. If it involves issues with local authorities, for example, we will follow them, have a discussion or meeting with local authorities. This way is faster and helps us a lot.”

On top of that, the analysis found that top leadership of the ministry and JPN play crucial roles in ensuring the PPR project is delivered efficiently. Their involvement in monitoring and problem solving of any issue with regards to project development has facilitated the works of DD-KPKT, particularly issues related to land matters with the state government and local authorities. Informant 1 reveals:

“KSU (Ministry Secretary-General) has its war room to discuss the problems of PPR construction, especially since he said PPR is close to his heart. So, he wanted PPR in good condition; our service delivery in tip-top condition, so the ground machinery has to make sure its service delivery is excellent.”

Effective communication at every level of project implementation is crucial for all information to be conversed effectively among the project actors. DD-KPKT officials led by the Project Director has the authority to communicate directly with the contractor on behalf of the client where problems are brought up to them for decision making. If the problems could not be resolved, they are brought to a higher level such as war room and high-level development meeting at the ministry. The war room is one of the examples how communication was managed, and conflicts were resolved in the project among government officials particularly leaders at project level who can function well if they have a proper communication channel with the officials in the ministry as well as their subordinates at the organisation and project level.

In terms of participants' selection process, JPN used National Housing Management System (SPRN) to manage the application for PPR projects. To ensure data accuracy, the application is cross-checked with other government databases such as e-Kasih, income tax data, and cost of living allowance database. The selection committee chaired by the director-general of JPN decides on the successful applicants, and the names are displayed at the PPR project area for public viewing and comments before the list is finalised. Informant 3 affirms:

“So, there is no issue in terms of transparency, of course not to say that nobody question, but we are doing as best as we could to make sure the element of transparency and we also do not want people to keep questioning our decisions... because after the committee meeting it will go to public display, so we will put it in the PPR area. So, anybody can question, and we will check, if there is a locus standi, we will omit the name. That is our standard SOP.”

Project hand over and operationalisation

During project delivery process, JPN as a client has recommended for DD-KPKT to recheck the delivery process and delay the delivery date considering there are still rectification works to be done by the contractor while the inspection was conducted on the 5th April 2018. However, on the 4th June 2018, DD-KPKT in the reply memo suggested that the major defect (collapsed ceilings in the hall) have been rectified by the contractor and other defects are deemed as minor defect and suggested for all parties to proceed with the delivery of the project. Eventually, the collapsed ceilings were repaired between 27th April 2018 to 3rd May 2018. Therefore, the delivery document illustrates that all the significant processes were conducted before the delivery process, even though certain procedures were not clearly described on how it was done. Nevertheless, the document shows how JPN as a client did recommend delaying the process of delivery in order for the rectification works to take place. It clearly shows how mutual trust between project actors leads to collaboration and decision making, thus contribute to facilitating works and quality control during project implementation and hand over.

The facility manager is appointed once the project is delivered to JPN and ready to be operationalised. During the observation, it is found that maintenance and defect repair works is still actively being conducted by the contractor while the facility manager actively managed the operational governance of the PPR. The facility manager is the middle person between the residents and the government (JPN). Hence, the residents seem to trust the facility manager

as the representative of the government so that they can propose ideas, programs, and ways on how to improve their neighbourhood. It is observed that the roles of the facility manager are crucial to ensure the project sustainability and the practices of shared responsibility whereby the long-term benefits could be optimised by the target participants.

Continuous improvement is practised in the context of the PPR project as a whole. JPN has secured government approval to have a larger built-up area for future PPR projects from 700 s.f. to 900 s.f. in order to enhance the living experience of the urban poor as well as to accommodate a bigger family. Also, PPR projects used tiles replacing the use of cement render since 2012, which is also part of the continuous improvement of the PPR project. Informant 1 shares her thought:

“For me, we add value to the project since we do not only build houses, but we also build community in this PPR. So, we always have to improve on quality and the state of ease and contentment of the people. We are not just satisfied with what we have, for example, with (built-up) 700 s.f., but we think about their comfort, their complaints, we always want to improve.”

There is a sense of fulfilment among the informants, mainly when the project is completed, and the target groups, which consist of urban poor and squatters, receive their house keys. While the output of the project is based on quality within the cost and duration given, and risks mitigated, the outcome of this project is related to the enhanced standard of living of the target groups. It is found that the residents of the PPR project are comfortable staying there since it comes with many facilities and amenities to complement their lives. Although several residents struggle to adapt to the culture of a clean and ethical community, it is the roles of the facility manager and JPN as well as DBKL to conduct programs regularly to improve the living experience.

Discussion

The project was triggered by the owner of the land, which is also a property developer. They proposed to the government for the development of the PPR project to accommodate the squatters who lived on the land, which is also partially owned by the government. The top-down approach of the decision was made to develop the land as a PPR project where this approach enables top-level officials to make decisions on project scopes and planning without active consultation with the public and other stakeholders (Shiferaw, Klakegg and Haavaldsen, 2012). As the squatter community will be the main participants of the project, active engagements with them, especially in the front-end of the project cycle are crucial since unresolved issues will affect the project outcomes. However, engagements in the front-end of this project, especially with the target groups, were not actively exercised, thus opened room for the communication gap between project actors and target groups.

Through direct negotiation, the developer was awarded the contract to design and construct the PPR project considering they are the party that proposed the project and willing to sacrifice a portion of their land for the government to accommodate the project. While a limited tender system through the Swiss Challenge method could better reflect good governance practice in this particular situation, there is nothing that can be done by KPKT and JPN since the decision for direct negotiation was made by the Ministry of Finance of Malaysia and could not be overruled by KPKT. However, it is found that a close and sustainable partnership is obtained by the government and developer-cum-contractor in

this case which could contribute to proper risk allocation among project actors (Abednego and Ogunlana, 2006). Proper risk allocation between project actors, although for this scale of the project, is still significant in assisting faster problem solving and efficiency in the implementation of this project.

Furthermore, the VM was exercised to enhance the value of the project for the benefit of all stakeholders. The active participation of project actors who are also stakeholders of the project signals their active involvement in decision making, and they realised the needs of VM benefits for the project (Jaapar, Amani and Zawawi, 2014). It is essential to ensure the attendance of officials who can decide cost-related issues where it could reduce the misunderstanding and conflict between project actors, mainly when there are two different governing parties at the federal and state level.

The application of many guidelines in public projects demonstrates the governance mechanisms imposed on the public officials in planning and managing projects. The compliance of the guidelines reflects the ability of public officials to understand and execute activities according to the procedures set by the government. Although guidelines of project development do not provide structure, processes, and decision-making models as of project governance frameworks (Project Management Institute (PMI), 2016), they are established to be followed by the public officials in line with the principles of accountability and transparency. Subsequently, accountability and transparency are project governance elements embraced throughout the project cycle (Shiferaw, Klakegg and Haavaldsen, 2012; Levie, Burke and Lannon, 2017). The principle of transparency is also practised in the participants' selection process, especially with the utilisation of the national poverty database during application screening and the display of selected participants' names for public viewing and comments. Although the final decisions are still under the accountability of the selection committee at JPN level, the transparency of participants selection is crucial in improving management mechanisms and regaining stakeholders' trust (Matei and Drumasu, 2015).

Both project monitoring and reporting involved multi-layer hierarchy, which reflects the fragmentation of public projects, and multiple project actors are concerned. From site visits to reporting in top management meetings at the ministry level, there is an active interplay between the project actors. Project activities are controlled through the provision of the contract in addition to the mandated trust between parent organisation, project-based organisation, and the contractor. The positive interplay, as demonstrated in this project, generates value to all the project stakeholders, as suggested by Riis et al. (2019). Moreover, various dimensions of trust influence the stakeholders' relationship, transaction and project performance (Strahorn, Gajendran and Brewer, 2015).

It is found that JPN and DBKL are having difficulty in convincing the squatters to move into their new homes since the occupancy rate is only 46.4%, as of 31 December 2019, although the project was completed on 22 December 2017. Issues such as the qualification of the squatters, land compensation, relocation allowances, and the difficulty of adapting to a new lifestyle are among the barriers identified in this study. Stakeholders' management plays crucial roles where continuous engagements with the target groups could reduce the communication gap, and in turn expedite the problem-solving. Although some of the solutions could not satisfy the squatters, public officials could be empowered to take the command and regularly engage with the target group. Collective decision making should be exercised through a stakeholder-based process where stakeholders are empowered due to their interests in the operations and outcomes (Gomes, 2006).

Operation governance of the completed project is about engaging facilities management and providing continuous improvement of the project. Although the facilities management is a common strategic choice of government that involved empowerment to the third party to provide services to the people (Hashim et al., 2015), it causes financial burden to the government, and it is not sustainable in the long term (Shuid, 2016). On the other hand, the practices of continuous improvement in the context of the PPR project as a whole have enhanced the governance of PPR projects. Two project outcomes have been identified for this case study, which is the project deliverability with specification compliance as well as the enhanced living standard of urban poor. Thus, the adherence to project guidelines and the application of project governance practices contribute to the achievement of project outcomes, as suggested by Bekker and Steyn (2008).

Conclusions

The purpose of this study is to determine the project governance practices in the context of urban public housing projects from the perspective of public officials. Project governance is informally practised by the project actors throughout the project cycle with several underlying project governance elements. Every project actor must have a clear understanding and apply effective stakeholder management, which, in turn, will contribute to effective project delivery. Besides that, mutual trust, empowerment, and collective decision making are elements of project governance that could be applied in the context of the positive interplay between project actors in public projects. The positive interplay between the parent organisation and project-based organisation, even without specific project governance, is still significant in adding value and guiding public officials to deliver the project effectively to the intended target groups, subsequently facilitate the achievement of project outcomes. The findings of the study will enable related public organisations, particularly the KPKT, JPN and other agencies to reinforce the underlying project governance elements towards the strengthening of urban public housing delivery system.

This study signifies contribution to research concerning the learning of the project governance practices and its guided elements in the context of an urban public housing project for low-income people. It also discovered the interplay of the project governance elements through the lens of stakeholder theory. The understanding of this interplay in the context of urban public housing project could benefit a broader scope of the project governance field, although further research is required. The evidence from this study suggests that the top-down approach in project initiation should be complemented by the bottom-up approach through active and continuous stakeholder engagement by the relevant government agencies. The target groups of PPR should be allowed to take part in decision making in the front-end of the project, while lessons learned from previous projects are invaluable input, which should be compiled and documented for future references. Although the fragmented nature of public projects is considered a point of weakness, the success of project delivery could be achieved through the utilisation of project governance practices applicable in the context of public projects.

Recommendations and limitation

Current practices of project governance could be improved with awareness and a better understanding of the importance of project governance among public officials. Subsequently, it will enable the development of project governance frameworks specifically

for public housing projects. However, before the development of project governance frameworks, more data are needed in other similar projects to diversify the understanding of the practices of project governance. While this study only looks through the lens of stakeholder theory, the interplay between project actors could be further understood by looking through other theories that could potentially derive valuable meanings for the topic. Hence, a case study research in other models of urban public housing could extend the discovery of other project governance elements while validating the findings of this study from different perspectives.

It is essential to note that this study is limited to a case study related to the development of housing assistance to the urban poor and squatters, and therefore, it is limited to the actors involved and the particular local conditions. The data for this study was gathered using semi-structured interviews, document analysis, and observation through a single case study. Considering the limitation of a single case study, conducting multiple case studies could offer a better understanding of the topic.

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